



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 27 2012

REPLY TO THE ATTENTION OF:

Andrew Stewart
Chief
Permits and Stationary Source Modeling Section
Bureau of Air Management
Wisconsin Department of Natural Resources
PO Box 7921
Madison, Wisconsin 53707-7921

Dear Mr. Stewart:

The U.S. Environmental Protection Agency has the following comments on the Wisconsin Department of Natural Resources' (WDNR) draft of the construction permit for Calumet Superior, LLC. The draft permit is being proposed as a construction permit (#12-DCF-023). The permit authorizes the facility to allow the construction of fugitive sources including connectors, valves, and pumps.

In order to ensure that the project meets Clean Air Act requirements, that the permit will provide necessary information so that the basis for the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments.

Combining several small projects into single permit with one volatile organic carbon (VOC) limit effectively creates a cap that only applies to select components of any unit at the facility. EPA provides facilities with the option to utilize caps, or bubbles, as limits in cases in which the entire facility, under a Plantwide Applicability Limit (PAL), or the entirety of specific units are included under the cap. However, as stated in a memorandum from John B. Rasnic to David Kee dated March 13, 1992, "...the bubble need only be granted to the extent that it facilitate enforceability of the limits applied. Also, the decision whether to grant a bubble should consider the bubble's impact on our ability to evaluate whether any future physical or operational changes at the heaters should be subject to NSR." The draft permit allows the facility to include parts of units into a bubble and leave other parts of the same unit out of the bubble, creating an interplay between the bubbled and non-bubbled units that is impossible to enforce as WDNR will not have the opportunity to review the impact that the added components will have on existing units prior to construction. It is noted in the preliminary determination that, "the facility needs to ensure that the additional components being added do not increase the potential emissions from a process unit to the point that its potential emissions exceed the significant increase threshold for the original prior modification or construction, if that modification/construction was approved as a synthetic minor project which was not reviewed under PSD. The source obligation clause

under PSD (s. NR 405.16(2), Wis. Adm. Code) would be triggered if the source's (the process unit) potential emissions were found to exceed the 40 tons per year (tpy) VOC significance threshold for the net emission increase (as a result of the new additional components)." WDNR addresses this concern by stating that, "This is not anticipated to be an issue, since individual components have quite small 'individual' emissions, and the additional new components will only be added as needed to improve safety and operability throughout the entire refinery." However, the permit allows each individual project authorized under the permit to contribute up to 1 tpy which is a large enough sum to cause an existing unit with high VOC emissions to exceed the 40 tpy VOC significance threshold. Therefore EPA believes that not enough information is provided in the draft permit to ensure that the facility will not be in violation of the Clean Air Act and the permit should not be issued as drafted. If the facility would like to retain broad discretion provided under a cap, EPA recommends that the facility apply for a Plantwide Applicability Limit (PAL), otherwise the facility should apply for separate permits for each project as they arise.

In addition to the overarching concern that the draft permit is not approvable EPA would like to provide the following comments on the permit.

- 1) As of July 1, 2011, a source can be a major source for its greenhouse gas (GHG) emissions alone if the potential to emit (PTE) is 100,000 tpy or greater of carbon dioxide-equivalent, thus being subject to PSD requirements. Please provide the GHG PTE. If the GHG PTE is greater than the 100,000 tpy please conduct a PSD Best Available Control Technology (BACT) analysis and incorporate the selected BACT into the permit.
- 2) On September 12, 2012, EPA lifted the stay on the New Source Performance Standards (NSPS) of Petroleum Refineries and for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007 (Subpart Ja). Please review these standards and incorporate applicable requirements into the permit.
- 3) The applicant provided one example in which a theoretical project authorized under the permit does not constitute a capital expenditure and would therefore not be subject to NSPS subparts VVa or GGGa. However, the capital expenditure threshold given appears to be incorrectly calculated. Given the information provided by the facility it appears that the capital expenditure threshold should be equal to \$837,330 for subpart GGGa and \$1,495,230 for subpart VVa, whereas the values presented by the facility are \$915,320 and \$1,634,538 for GGGa and VVa respectively. If, in fact, the value was miscalculated, the capital expenditure threshold is exceeded for subpart GGGa as the cost for added components is \$843,600. Therefore it appears incorrect to assume that all projects authorized under the permit will be below the capital expenditure threshold for both GGGa and VVa, especially as the threshold will decrease for older units, which are more likely to have components added under the permit than the more recently installed example of the BenzOUT Unit. As such please include a requirement in the permit that the facility calculate and record the calculated capital expenditure thresholds and cost for each project undertaken and submit this information to WDNR in quarterly reporting.

We look forward to working with you to address all of our comments. If you have any further questions, please feel free to contact Andrea Morgan, of my staff, at (312) 353-6058.

Sincerely,

A handwritten signature in cursive script that reads "Genevieve Damico". The signature is written in dark ink and is positioned above the printed name and title.

Genevieve Damico
Chief
Air Permits Section